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## TRANSMITTAL OF APPEAL BRIEF (Large Entity)

Docket No.  
0019RECEIVED  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Application Of: Sigel et al.

Serial No. 09/777,040	Filing Date February 5, 2001	Examiner Ferguson, Lawrence D.	Group Art Unit 1774
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Invention: SURFACE COVERING HAVING GLOSS IN-REGISTER AND METHOD OF MAKING

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on November 17, 2003

The fee for filing this Appeal Brief is: \$330.00

- A check <sup>including</sup>  the amount of the fee is enclosed.
- The Director has already been authorized to charge fees in this application to a Deposit Account.
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Signature

Dated: February 19, 2004

Douglas E. Winters  
Reg. No. 29,990

I certify that this document and fee is being deposited on  with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Gary A. Sigel et al.

Serial No.: 09/777,040

Filed: February 5, 2001

For: SURFACE COVERING HAVING  
GLOSS IN-REGISTER AND  
METHOD OF MAKING



Examiner: Lawrence D. Ferguson

Art Unit: 1774

Confirmation No.: 8701

Docket No.: 0019

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This brief is submitted in triplicate pursuant to 37 CFR 1.192 in support of the Notice of Appeal filed November 20, 2003, in the above-identified application. A one month extension of time to February 20, 2004, is included in the accompanying transmittal letter.

**REAL PARTY IN INTEREST**

The real party in interest in this application is Armstrong World Industries, Inc., the assignee of the present application.

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**RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to Appellants, or Appellants' legal representatives, which will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending Appeal.

### STATUS OF CLAIMS

Claims 1 to 22, 38 to 45 and 55 to 60 are pending in the application. All of the pending claims are rejected.

### STATUS OF AMENDMENTS

The Amendment and Response After Final, filed by facsimile on August 19, 2003, was not entered. The Amendment mailed on March 17, 2003, with a certificate of mailing was filed on March 24, 2003, and entered. Therefore, the claims are as they appear in the March 24, 2003, amendment.

### SUMMARY OF INVENTION

The invention is a surface covering or a surface covering component having a thermoset top coat layer with different gloss levels in various regions of the top coat layer and the method of making such a surface covering or surface covering component. (See the Abstract.) Thermoset or crosslinked resins are disclosed at page 6, lines 9 to 23, and page 10, line 26, to page 11, line 2, for example. The top coat may contain a flattening agent (page 2, lines 9 and 10; page 4, line 1; page 4, line 27, to page 5, line 12; and page 10, lines 4 to 9, for example), a cure altering agent (page 7, line 21, to page 8, line 9, for example), thermal initiators (page 4, lines 10 to 26, for example), or a gloss controlling agent (page 3, line 22, to page 4, line 9, for example). The thermoset top coat may overlie a transparent or translucent film (page 11, lines 7 to 11, and original claim 41, for example).

## ISSUES

Are claims 1, 3, 4, 8, 9, 12 to 14, 21, 38 and 55 to 57 properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,491,616 to Schmidle et al. (Schmidle) in view of U.S. Patent No. 5,985,416 to Sherman et al. (Sherman)?

Are claims 9 and 16 to 22 properly rejected because they are product-by-process claims that introduce process limitations to the product claims?

Are claims 21 and 41 properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,491,616 to Schmidle et al. (Schmidle) in view of U.S. Patent No. 5,985,416 to Sherman et al. (Sherman) further in view of U.S. Patent No. 6,333,072 to Sigel et al. (Sigel)?

## GROUPING OF CLAIMS

With respect to the rejection of the claims under 35 U.S.C. § 103(a) as being unpatentable over Schmidle in view of Sherman, the claims do not stand or fall together. Claims 1, 9 and 38 are separately patentable. Claims 4 and 9 are separately patentable. Claims 3, 13 and 56 are separately patentable. Claim 8 is separately patentable. Claims 12, 14 and 57 are separately patentable. Claim 21 is separately patentable. Claim 55 is separately patentable.

With respect to the rejection of claims 9 and 16 to 22 as being properly rejected because they are product-by-process claims that introduces process limitations to the product claims, the claims stand or fall together.

With respect to the rejection of the claims under 35 U.S.C. § 103(a) as being unpatentable over Schmidle in view of Sherman further in view of Sigel, the claims do not stand or fall together. Claim 21 is separately patentable. Claim 41 is separately patentable.

## ARGUMENT

In the Advisory Action mailed from the U. S. Patent and Trademark Office (PTO) on October 24, 2003, (Paper No. 12), the Supervisory Patent Examiner maintained the Examiner's rejection of all of the pending claims for the reasons of record. The Supervisory Patent Examiner has taken the position that "Applicant seeks to narrow the scope of the claims by amending claim 1 to have an 'exposed surface' and by adding claims 61-65." However, claim 1 was amended merely to improve definiteness. Previously presented claim 1 required "the thermoset top coat [to] compris[e] an exposed surface." Claim 1 was amended to require "a portion adjacent the exposed surface [of the top coat to include a gloss controlling agent]" rather than the surface including the gloss controlling agent. Unentered new claims 61 to 65 more definitely defined the invention by narrowing the scope of the claims from which they would have depended.

In the Final Office Action mailed from the U. S. Patent and Trademark Office (PTO) on June 19, 2003, (Paper No. 9), the Examiner rejected claims 1 to 22, 38 to 40, 43 to 45 and 55 to 58 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 4,491,616 to Schmidle et al. in view of U.S. Patent No. 5,985,416 to Sherman et al., and claims 21, 41, 42, 59 and 60 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 4,491,616 to Schmidle et al. in view of U.S. Patent No. 5,985,416 to Sherman et al. further in view of U.S. Patent No. 6,333,072 to Sigel et al.

Attorney for Applicants will argue separately the patentability of claims 1, 3, 4, 8, 9, 11 to 14, 21, 38, 41 and 55 to 57. The remaining claims stand or fall with the claims from which they depend.

### **Section 103 Rejections over Schmidle et al. in view of Sherman et al.**

Independent claims 1, 9 and 38, from which all of the remaining pending claims depend, require a thermoset top coat. The Examiner acknowledges that Schmidle does not teach a thermoset top coat. He looks to Sherman for a teaching of a thermoset top coat and combines the teachings of Sherman and Schmidle. As correctly noted by the Examiner, Schmidle and Sherman are analogous and Sherman teaches that thermoset top coats can resist discoloration and degradation. However, substituting the wear layer of Sherman for the wear layer of Schmidle destroys the invention of Schmidle. Therefore, the combination of Schmidle and Sherman is improper. See Tec Air, Inc. v. Denso Mfg. Michigan Inc., 192 F.3d 1353, 1359-60 (Fed.Cir.1999).

To establish a *prima facie* case of obviousness, Denso must show "some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *Fine*, 837 F.2d at 1074, 5 USPQ2d at 1598. There is no suggestion to combine, however, if a reference teaches away from its combination with another source. *See id.* at 1075, 5 USPQ2d at 1599. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant ... [or] if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed.Cir.1994). If when combined, the references "would produce a seemingly inoperative device," then they teach away from their combination. *In re Sponnoble*, 56 C.C.P.A. 823, 405 F.2d 578, 587, 160 USPQ 237, 244 (1969); *see also In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed.Cir.1984) (finding no suggestion to modify a prior art device where the modification would render the device inoperable for its intended purpose).

(Italics in original.)

Schmidle teaches a method of making a surface covering having multiple gloss levels by applying a wear layer comprising a blend of a thermoplastic, such as polyvinyl chloride, and an

acrylic monomer capable of being polymerized and cross-linked (column 10, lines 6 to 22; also note all of the examples include PVC, see the table at column 11). The blend must be thermoplastic to be able to be “subject[ed] to a sufficient amount of thermal energy to permit the remaining uncured resinous composition to flow from a dull appearance into a glossy appearance” (Claim 1, paragraph (f)). Photoinitiator, which is printed onto selected areas of the base, migrates into portions of the wear layer blend. When exposed to radiation, the photoinitiator containing portion becomes thermoset, i.e. cross-linked, and retains its dull finish upon heating. The other portions must be thermoplastic to flow and become glossy upon subsequent heating. See column 14, line 59, to column 15, line 14, and claim 1.

The entire structure of Schmidle is subjected to actinic radiation and those regions of the wear layer into which the photoinitiator migrated retains a dull, matte finish when the surface covering is heated in a fusion oven at elevated temperatures to blow the foamable layer and fuse the wear layer. The regions of the wear layer without photoinitiator become relatively sleek, glossy or lustrous. See the Abstract; column 2, lines 1 to 29; column 3, lines 54 to 62; column 10, lines 6 to 22; and column 15, lines 3 to 14, for example.

Particularly note column 11, line 66, to column 12, line 4, and the wear layer formulation at column 16, lines 31 to 39, of Schmidle. The Schmidle wear layer composition does not contain photoinitiator. The only regions of the Schmidle wear layer that polymerizes (cross-links) are the predetermined portions that overlie the printing ink composition that contains photoinitiator.

The thermoset top coat of Sherman completely polymerizes. Otherwise the desired resistance to discoloration and degradation, an important objective of the invention, would not occur. See column 2, lines 47 to 52, and column 3, lines 48 to 54. If the Sherman top coat composition were substituted for the Schmidle top coat composition, as suggested by the

Examiner, the entire Schmidle top coat would polymerize (cure) when subjected to the heat in the oven. See column 3, lines 64 to 67. Therefore, it would not flow from a dull appearance into a gloss, as taught by Schmidle. This is contrary to the invention of Schmidle, which is to yield some areas of dull, matte finish and some areas of sleek, glossy or lustrous finish some areas.

Therefore, the combination of Schmidle and Sherman is improper and the claims requiring a thermoset top coat must be allowed. Specifically, since independent claims 1, 9 and 38 require a thermoset top coat, these claims and all of the claims independent on them are allowable over Schmidle in view of Sherman.

Claims 4 and 9 require the thermoset top coat to include a flattening agent. The Examiner looks to column 5, lines 1 to 8, of Schmidle for a suggestion of a top coat comprising a flattening agent. However, the cited section of Schmidle describes the backing layer and not the top coat. Therefore, there is no teaching or suggestion in Schmidle of a top coat comprising a flattening agent.

Further, the clay and limestone fillers disclosed by Schmidle, as well as pigments, are not flattening agents. Those of ordinary skill in the art, as reflected by patents assigned to numerous companies in the floor covering industry and the floor coating composition industry, do not equate flattening agents with fillers and pigments. See Shalov et al. U.S. Patent No. 5,830,937, assigned to Congoleum Corporation, column 16, lines 8 to 39 ("The present compositions may also contain other constituents as are known and available, including ... fillers such as clay and limestone ... A flattening agent such as fine silica may be used for conventional purposes to change the gloss and shine of the coating"); Shultz et al. U.S. Patent No. 5,670,237, assigned to Mannington Mills, column 9, lines 26 to 29 ("The final coating may contain a flattening agent to control the gloss. Such coating ... normally will have little pigment or filler therein"); Tsuei U.S. Patent No. 5,643,669 assigned to 3M, column 7, lines 15 to 18 ("The low VOC curable

coating compositions of the present invention can include other optional additives such as colorants, flattening agents, ... fillers and the like"); Zimmer et al. U.S. Patent No. 4,358,476, assigned to Lord Corporation, column 13, lines 39 to 45 ("The compositions of the invention can also contain ... pigments, fillers, flattening agents ... and other additives typically present in coating compositions. Such additive materials are well known ... and require no further elaboration"); and Allan U.S. Patent No. 3,800,013, assigned to GAF Corporation, column 11, lines 59 to 62 ("This final coating may contain a flatting agent to control gloss. Such coating ... normally will have little pigment or filler therein"). Therefore, claims 4 and 9 are allowable for this reason as well.

The Examiner was requested to support his position, if he disagreed that those of ordinary skill in this field know that flatting agents are not pigments or fillers. He declined to support his position with either an affidavit or additional prior art, as required by 37 CFR 1.104(d)(2). Therefore, claims 4 and 9, which include flatting agents in the top coat, and the claims dependent thereon, should be allowed.

Claims 3, 13 and 56 require a cure altering agent be included in the top coat. In the first sentence of the carryover paragraph on pages 2 and 3 of the Office Action dated June 19, 2003, the Examiner takes the position that "Schmidle discloses ... a wear layer ... comprising a radiation curable composition with regions of low and high gloss levels wherein the regions comprise a photoinitiator" followed by the parenthetical phrase "photoinitiator and cure altering agent" referring to column 4, lines 64 to 68 of Schmidle. If the parenthetical phrase is meant to indicate that Schmidle teaches the use of cure altering agent in the top coat, he is incorrect. The cited passage describes the Schmidle base layer and not the top coat or wear layer.

Further, the present specification defines "cure altering agents" to be "photosensitizers, promoters and inhibitors." Cure altering agents are not photoinitiators. See page 7, lines 23 to

25 of the present specification. Photoinitiators create radicals that initiate polymerization. Cure altering agents either promote or inhibit curing. See page 8, lines 3 to 9, of the present specification. Therefore, claims 3, 13 and 56, which include a cure altering agent in the top coat, are allowable over Schmidle. Again it is improper to combine Schmidle and Sherman.

Claim 8 requires the top coat to comprise two thermal initiators. In the carryover sentence on pages 2 and 3 of the Office Action dated June 19, 2003, the Examiner takes the position that “Schmidle discloses that the wear layer comprises more than one initiator (first and second thermal initiators),” citing column 6, lines 3 to 7. Attorney for Applicants respectfully disagrees. The cited section discusses the composition of the base layer and not the top coat. The description of the base layer begins at column 4, line 17, of Schmidle and ends at column 6, line 37. The description of the wear layer begins at column 10, line 6. There is no teaching or suggestion in Schmidle of a wear layer comprising two thermal initiators. Therefore, claim 8 is allowable over Schmidle. Again it is improper to combine Schmidle and Sherman.

Claims 12, 14 and 57 require a thermal curing agent. Near the middle of page 3 of the Office Action dated June 19, 2003, the Examiner appears to equate heat stabilizers and thermal curing agents and gloss controlling agents. He states that “Schmidle discloses that the wear and pattern layer compris[es] the UV-curable composition also comprises various heat stabilizers (thermal curing agent and gloss controlling agent)” referring to column 4, line 64, to column 6, line 16, of Schmidle. Again, this section of Schmidle refers to the backing layer and not the top coat.

The Examiner was requested to support his position that heat stabilizers are the same as thermal curing agents and gloss controlling agents, by pointing to where in the reference such teaching is disclosed or presenting a convincing line of reasoning in light of the teaching of the reference, in accordance with MPEP section 706.02(j). This he failed to do. Therefore, claims

12, 14 and 57, as well as the claims dependent thereon should be allowed over Schmidle. Again it is improper to combine Schmidle and Sherman.

Claim 21 requires the UV-curable composition that forms the thermoset top coat to include a photoinitiator. Near the top of page 5 of the Office Action dated June 16, 2003, the Examiner admits that “Schmidle does not teach that the UV-curable composition includes a photoinitiator as in instant claim 21” and near the top of page 3 that “Schmidle further shows that the photoinitiator forms a discontinuous pattern.” Sherman does not teach or suggest a photoinitiator. Therefore, claim 21 is not obvious over Schmidle. Again it is improper to combine Schmidle and Sherman.

Claim 55 requires the gloss controlling agent to be either a thermal initiator or a cure altering agent. Since this is not taught in Schmidle or Sherman, claim 55 is allowable over Schmidle in view of Sherman even though it is improper to combine Schmidle and Sherman.

**Rejection for being product-by-process claims.**

In the paragraph beginning on page 3 of the Office Action dated June 19, 2003, the Examiner states that “Claims 9 and 16-22 are rejected because they are product-by process claims.” It is believed that the Examiner intended to reject the claims because they are allegedly obvious in view of the combination of Schmidle and Sherman when the process limitations are ignored. However, the stated rejection is because the claims are product-by process claims. If maintained, the basis for such a rejected is respectfully requested.

Alternatively, the Examiner may be correct that “process limitations are given no weight in product claims” (last sentence of the carryover paragraph on pages 3 and 4). However, the other limitations of the claim must be considered. Claim 9 requires a thermoset top coat. Therefore, claim 16 to 22, which depend directly or indirectly on claim 9, require a thermoset top

coat. For the reasons discussed above, claim 9 and the claims depended thereon are allowable over Schmidle in view of Sherman, since Schmidle and Sherman cannot be properly combined.

**Section 103 Rejection over Schmidle et al. in view of Sherman et al. further in view of Sigel et al.**

Again, claim 21 requires the UV-curable composition that forms the thermoset top coat to include a photoinitiator. Near the top of page 5 of the Office Action dated June 16, 2003, the Examiner admits that “Schmidle does not teach that the UV-curable composition includes a photoinitiator as in instant claim 21” and near the top of page 3 that “Schmidle further shows that the photoinitiator forms a discontinuous pattern.” Sherman does not teach or suggest a photoinitiator.

Near the middle of page 5 of the Office Action dated June 16, 2003, the Examiner relies on Sigel, which “shows a gloss surface coated wear layer comprising … photoinitiators in a UV-curable resin layer.” However, substituting the photoinitiator containing resin of Sigel for the wear layer of Schmidle would destroy the invention of Schmidle. Therefore, claim 21 is not obvious over Schmidle in view of Sherman further in view of Sigel.

As discussed above with respect to independent claims 1, 9 and 38, the entire structure of Schmidle is subjected to actinic radiation and those regions of the wear layer into which the photoinitiator migrated retains a dull, matte finish when the surface covering is heated in a fusion oven at elevated temperatures to blow the foamable layer and fuse the wear layer. The regions of the wear layer without photoinitiator become relatively sleek, glossy or lustrous. If the Sigel top coat composition were substituted for the Schmidle top coat composition, as suggested by the Examiner, the entire Schmidle top coat would polymerize when subjected to the radiation. Therefore, when the heat is subsequently applied, the polymerized top coat would not flow from a dull appearance into a gloss. This is contrary to the invention of Schmidle, which is to yield

some areas of dull, matte finish and some areas of sleek, glossy or lustrous finish some areas.

Therefore, the combination of Schmidle, Sherman and Sigel is improper and claim 21, which requires the top coat to include a photoinitiator, must be allowed.

Claim 41 requires the film, which the patterned layer and thermoset top coat overlie, to be transparent or translucent. Near the top of page 5 of the Office Action dated June 19, 2003 in the parent application, the Examiner states that "Schmidle teaches that several types of backing sheets are equally suitable and are utilizable in special situations, such as transparent backing sheets" referring to column 4, lines 17 to 43. The Examiner was requested to point out where in Schmidle there is a teaching or suggestion that the "special situations" include transparent backing sheets. Since he has failed to supply such support, in accordance with MPEP section 706.02(j), claim 41 should be allowed.

### CONCLUSION

Claims 1 to 22, 38 to 40, 43 to 45 and 55 to 58 are not obvious over Schmidle in view of Sherman under 35 U.S.C. § 103(a). There is no basis to reject claims 9 and 16 to 22 for being product-by process claims. Claims 21, 41, 42, 59 and 60 are not obvious over Schmidle in view of Sherman further in view of Sigel under 35 U.S.C. § 103(a). The dependent claims are allowable, if the claim(s) from which they depend are allowable. Accordingly, all of the pending claims should be found allowable. Reversal of the rejections and allowance of the application is respectfully requested.

Respectfully submitted,

2/19/04  
Date

  
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April L. Fiedler

Pending Claims

1. A surface covering or surface covering component comprising:
  - a) a substrate and,
  - b) a thermoset top coat overlying the substrate, the thermoset top coat being formed from a radiation curable composition, the thermoset top coat comprising an exposed surface that includes a first region with a first concentration of a gloss controlling agent and a second region with a second different concentration of the gloss controlling agent, whereby the exposed surface of the thermoset top coat adjacent the first region has a first gloss level and the exposed surface of the thermoset top coat adjacent the second region has a second different gloss level.
2. The surface covering or surface covering component of claim 1, wherein the thermoset top coat directly overlies the substrate.
3. The surface covering or surface covering component of claim 1, wherein the thermoset top coat includes or is in contact with a cure altering agent selected from the group consisting of photosensitizers, accelerators and inhibitors.
4. The surface covering or surface covering component of claim 1, wherein the radiation curable composition comprises a flattening agent.
5. The surface covering or surface covering component of claim 1, wherein the radiation curable composition is continuous and overlies the entire substrate.

6. The surface covering or surface covering component of claim 1, wherein the first region and second region are localized adjacent one surface of the thermoset topcoat.
7. The surface covering or surface covering component of claim 1, wherein the gloss controlling agent is selected from the group consisting of a thermal initiator, photoinitiator, a cure altering agent and mixtures thereof.
8. The surface covering or surface component of claim 1, wherein the gloss controlling agent is a first thermal initiator, and the topcoat composition comprises a second thermal initiator.
9. A surface covering or surface covering component comprising:
  - a) a substrate and
  - b) a thermoset top coat comprising a first region having a first gloss level and a second region having a second gloss level different from the first region, the thermoset top coat overlying the substrate,

wherein the thermoset top coat is formed from a UV-curable composition comprising a UV curable component and a flattening agent, and

wherein the different gloss levels are achieved by curing the UV-curable composition using a first polymerization condition in the first region and a second different polymerization condition in the second region.
10. The surface covering or surface covering component of claim 9, wherein the thermoset topcoat directly overlies the substrate.

11. The surface covering or surface covering component of claim 9, further comprising a patterned layer between the substrate and the thermoset top coat, wherein the patterned layer includes a pattern of a gloss controlling agent selected from the group consisting of a photoinitiator, a thermal initiator, a cure altering agent, and mixtures thereof, and the patterned layer is in contact with the UV-curable composition before the UV-curable composition is cured.

12. The surface covering or surface covering component of claim 9, further comprising a patterned layer between the substrate and the thermoset top coat, wherein the patterned layer includes a pattern of a gloss controlling agent selected from the group consisting of a thermal initiator, cure altering agents, and mixtures thereof,  
the patterned layer is in contact with the UV-curable composition, and the UV-curable composition comprises a thermal curing agent.

13. The surface covering or surface covering component of claim 11 wherein the cure altering agents include photosensitizers, accelerators and/or inhibitors.

14. The surface covering or surface covering component of claim 11, wherein the patterned layer includes a thermal curing agent.

15. The surface covering or surface covering component of claim 9, wherein the regions of different gloss levels are in register with the patterned layer.

16. The surface covering or surface covering component of claim 9, wherein the second polymerization condition takes place after the first polymerization condition.

17. The surface covering or surface covering component of claim 9, wherein the first polymerization condition includes exposure to UV irradiation and/or heat.

18. The surface covering or surface covering component of claim 9, wherein the second polymerization condition includes exposure to EB or UV irradiation.

19. The surface covering or surface covering component of claim 9, further comprising a patterned layer that includes a photoinitiator in selected regions, wherein the UV-curable composition applied to the substrate does not include a photoinitiator, and the UV-curable composition is polymerized in register with the photoinitiator in the selected regions by UV irradiation.

20. The surface covering or surface covering component of claim 19, wherein the UV-curable composition not in register with the photoinitiator is subsequently polymerized by electron beam irradiation.

21. The surface covering or surface covering component of claim 9, further comprising a patterned layer that includes a cure altering agent in the first region, wherein the UV-curable composition applied to the substrate includes a photoinitiator, and the UV-curable composition is polymerized by UV irradiation.

22. The surface covering or surface covering component of claim 21, wherein the UV-curable composition is subsequently further polymerized by electron beam irradiation or UV irradiation under conditions different than the UV irradiation in claim 21 and/or by longer exposure times.

38. A surface covering component comprising:

- a) a film,
- b) a patterned layer comprising a gloss controlling agent overlying the film,
- c) a thermoset top coat overlying the patterned layer, wherein the top coat

comprises at least two areas with gloss levels different from one another and at least one of the areas is substantially in register with at least a portion of the design of the patterned layer.

39. The surface covering component of claim 38, wherein the patterned layer is discontinuous.

40. The surface covering component of claim 38, wherein the patterned layer further comprises a pigment.

41. The surface covering component of claim 38, wherein the film is a transparent or translucent film.

42. The surface covering component of claim 38, wherein the thermoset top coat is transparent or translucent.

43. The surface covering component of claim 38, wherein the film comprises a second patterned design applied to the top or bottom surface.

44. The surface covering component of claim 43, wherein the design comprises a pigment or a foam controlling agent.

45. The surface covering component of claim 43, wherein a patterned layer containing a gloss controlling agent is in register with the second design on one of the surfaces of the film.

55. The surface covering or surface covering component of claim 1, further comprising a patterned layer between the substrate and the thermoset top coat, wherein the patterned layer includes a pattern of a gloss controlling agent selected from the group consisting of a thermal initiators, cure altering agents, and mixtures thereof.

56. The surface covering or surface covering component of claim 55, wherein the cure altering agents include photosensitizers, accelerators and/or inhibitors.

57. The surface covering or surface covering component of claim 55, wherein the patterned layer includes a thermal curing agent.

58. The surface covering or surface covering component of claim 55, wherein the regions of different gloss levels are in register with the patterned layer.

59. The surface covering or surface covering component of claim 1, further comprising a patterned layer that includes a photoinitiator in selected regions.

60. The surface covering or surface covering component of claim 1, further comprising a patterned layer that includes a cure altering agent in the first region, wherein the UV-curable composition applied to the substrate includes a photoinitiator.